Author Index

Agnusdei, D. (Suppl 2) S9
Aida, Y. 403
Alcobendas, M. 53
Alhava, E. M. (Suppl 1) S3
Alhava, E. M. (Suppl 1) S21
Alhava, E. M. (Suppl 1) S26
Alpert, B. 20
Amir, D. 359
Andresen, J.-H. 77
Antoniades, L. G. 288
Aoba, T. 6
Arnala, I. (Suppl 1) S31
Avioli, L. V. (Suppl 2) S16
Avioli, L. V. (Suppl 1) S1
Avioli, L. V. (Suppl 1) S5
Avioli, L. V. 141
Avioli, L. V. (Suppl 2) S1

Badurski, J. E. 27
Baghurst, P. A. 161
Barden, H. S. 235
Barrett-Connor, E. 305
Bassett, C. A. L. 216
Baud, C. A. 53
Baylink, D. J. (Suppl 1) S64
Bellon, M. J. 161
Benayahu, D. 202
Bennet, R. 416
Bianchi, M. L. 1
Bianco, P. 421
Birkenhäger, J. C. 35
Bisek, J. P. 235
Bonar, L. C. 378
Boskey, A. L. 193
Boskey, A. L. 389
Bouillon, R. 168
Bouillon, R. 84
Bouillon, R. 153
Boyan, B. D. 359
Boyde, A. 65
Brennan, M. J. 308
Brixen, K. 373
Brixen, K. 77
Broulik, P. D. 51
Butler, V. M. 308

Camporeale, A. (Suppl 2) S9
Caraceni, M. P. 1
Carlson, C. S. 438
Carstens, J. H. (Suppl 2) S2
Castanet, J. 53
Chamber, T. J. 407
Chambers, T. J. 317
Chambers, T. J. 238
Chao, E. Y. S. 427
Charles, P. 77
Chatterton, J. 161
Cheng, S.-L. 321
Chowdhury, M. H. 275
Christensen, S. E. 373
Christiansen (Suppl 1) S60
Christiansen, C. (Suppl 2) S14
Civitelli, R. 141
Clarkson, T. B. 438
Cleghorn, D. B. 161
Cochavy, D. 359
Coleman, R. E. 433
Collins, B. 251
Collins, B. 259
Collins, B. 383
Cooper, C. 144
Corcoran, T. A. 292
Cornish, J. 394
Cox, K. A. 43
Cummings, S. R. (Suppl 1) S15

Daley-Yates, P. T. 433
Daley-Yates, P. T. 416
Dawson-Hughes, B. 174
de la Piedra, C. 436
de la Piedra, C. 14
De Roo, M. 84
De Maertelaer, V. 95
de Vries, I. G. 355
DeFranco, D. J. 43
Deftos, L. J. 143
Demeester-Mirkine, N. 226
Dempster, D. W. 275
Dequeker, J. 84
Dequeker, J. 168
Devos, P. 84
Devos, P. 168
Diaz, Curiel, M. 436
Dick, B. L. 193
Dodwell, D. J. 433
Duncan, W. E. 308
Dunstan, C. R. 164
Dure-Smith, B. A. (Suppl 1) S64
Dziak, R. 333
Dziak, R. 197

Eanes, E. D. 248
Eich, M. 116
Eing, H. 340
El Feki, H. 269
Epstein, S. 232
Evans, M. 164
Evans, R. A. 164

Falsafi, R. 333
Farley, S. M. (Suppl 1) S64
Feinblatt, J. D. (Suppl 2) S2
Fisher, L. W. 421
Flanagan, A. M. 407
Fleisch, H. 138
Fleisch, H. 280
Fraioli, P. 71
Fried, A. 202
Frost, H. M. 303
Frost, H. M. 229
Frost, H. M. 301

Gandolini, G. 1
Gärdsell, P. 90
Gärdsell, P. 17
Gay, C. V. 153
Gennari, C. 141
Gennari, C. (Suppl 2) S9
Geusens, P. 168
Geusens, P. 84
Gevers, G. 84
Gifford, C. A. 235
Gilligan, C. (Suppl 1) S50
Glimcher, M. J. 378
Glimcher, M. J. 259
Glimcher, M. J. 383
Glimcher, M. J. 251
Glowacki, J. 43
Goff, J. 188
Goto, T. 128
Greenspan, S. L. 292
Griffin, R. G. 378
Gross, U. 359
Grynpas, M. D. 20
Gubler, H. P. 398
Guenther, H. L. 138

Hagel-Bradway, S. 333
Hall, T. J. 328
Hansen, R. M. 77
Hanson, J. A. 235
Hardman, A. E. 112
Hasling, C. 77
Hayes, W. C. 292
Haynes, J. S. 188
Heaney, R. P. (Suppl 1) S42
Heaney, R. P. 244
Hecker, A. T. 292
Heughebaert, M. 378
Heughebaert, J.-C. 378
Higashi, A. 179
Higgins, W. 328
Hightower, J. A. 349
Hillard, T. C. (Suppl 1) S55
Hills, E. 164
Hipp, J. A. 292
Hjerpe, A. 389
Hoggarth, C. R. 416
Holbrook, T. L. 305
Horowitz, M. 240
Howell, A. 433
Hudson, A. 112
Hugel, U. 340
Hukuda, S. 403

Iijima, M. 128
Imbimbo, B. 367
Inkovaara, J. A. (Suppl 1) S68
Inoue, T. 101
Ishida, K. 124

Janner, M. 280
Jayo, M. J. 438
Jerome, C. P. 398
Johnell, O. 17
Johnell, O. 90
Johnson, M. 134
Johnson, J. 174
Jones, P. R. M. 112
Jones, S. J. 65

Kahn, A. J. 221
Kamemizu, H. 128
Kanis, J. A. (Suppl 1) S33
Karachalios, T. 369
Kassem, M. 373
Katz. I. 20
Keenan, E. J. 183
Keenan, E. J. 183
Kerr, J. M. 58
Kin, K. 101
Klaus, G. 340
Klein, G. L. 143
Kontoyannis, S. A. 288
Kontoyannis, K. A. 288
Kopp, J. B. 248
Kraenzlin, M. E. (Suppl 1) S64
Krasznai, I. 298
Kushida, K. 101
Kusuhara, S. 124

Laitinen, K. (Suppl 1) S70
Lakatos, P. 292
Lakatos, P. 226
Lamberg-Allardt, C. (Suppl 1) S46
Larsson, K. 17
Laurent, E. 95
Lerner, U. H. 284
Lewallen, D. G. 427
Lian, J. B. 43
Libanati, C. R. (Suppl 1) S64
Lieberman, I. 20
Lindh, E. 17
Lipkin, E. W. 143
Lisart, J. 95
Ljunghall, S. 17
Lopez Gavilanes, E. 436
Lowe, C. 394
Lyritis, G. P. 369

Madsen, E. L. 107
Mäenpää, P. H. (Suppl 1) S26
Magiasis, B. 369
Mahonen, A. (Suppl 1) S26
Mai, C. M. 359
Maresca, M. 389
Markel, M. D. 427
Markowicz, E. 95
Martin, T. J. 394
Martyn, C. N. 144
Matsuda, I. 179
Matsuda, T. 403
Matsuda, I. 179
Matsui, K. 403
Mavrikakis, M. E. 288
Mazess, R. B. 235
Mazess, R. B. 107
Mehls, O. 340
Melkko, J. (Suppl 1) S24
Merke, J. 340
Mesina, C. 107
Milani, S. 367
Milde, P. 340
Montemurro, L. 71
Moreno, E. C. 6
Morin, R. L. 427
Moriwaki, Y. 128
Morris, H. A. 240
Mosekilde, L. 373
Mosekilde, L. 77
Moulopoulou, D. S. 288
Mühlbauer, R. C. 280
Murray, T. M. 120
Muzaffar, S. A. 120
Myers, M. A. 208
Myers, E. R. 292

Naeraa, R. W. 77
Nakamura, T. 179
Nancollas, G. H. 134
Need, A. G. 240
Nelson, P. N. 317
New, K. D. 313
Nielsen, J. 77
Nielsen, H. K. 373
Niemi, S. (Suppl 1) S24
Nijs, J. 84
Nilsson, B. E. 90
Nishiyama, S. 179
Nordin, B. E. C. 161
Nordin, B. E. C. 240
Norgan, N. G. 112
Norris, K. 58

O'Loughlin, P. D. 240
Obrant, K. 17
Ohashi, T. 124
Okamoto, S. 101
Ortiz, F. 436
Ortolani, S. 1
Orwoll, E. S. 183
Orwoll, E. S. 183
Ott, S. M. 143
Overgaard, K. (Suppl 1) S60

Pacovský, V. 51
Palomino, P. 436
Parfitt, A. M. 143
Parviainen, M. T. (Suppl 1) S26
Pawlica, J. 27
Peck, W. A. 321
Peramo, B. 436
Pirskanen, A. (Suppl 1) S26
Polley, K. J. 161
Polli, E. E. 1
Pols, H. A. P. 35
Pongchaidecha, M. 433
Popko, J. 27
Price, P. A. 355
Pringle, J. A. S. 3117
Pritzker, K. P. H. 20
Puzas, J. E. 208

Ramsey, E. E. 183
Ramsey, E. E. 183
Rankin, S. E. 438
Ransjö, M. 284
Rao, L. G. 120
Rapado, A. 436
Rapado, A. 14
Reichel, H. 340
Reid, I. R. 394
Ren, W. 197
Renugopalakrishnan, V. 259
Renugopalakrishnan, V. 251
Rey, C. 269
Rey, C. 251
Rey, C. 383
Rey, C. 259
Riboldi, A. 71
Richardson, C. F. 134
Risteli, L. (Suppl 1) S24
Risteli, J. (Suppl 1) S24
Ritz, E. 340
Rizzato, G. 71
Roberts, J. E. 378
Robey, P. G. 421
Robey, P. G. 248
Rogowski, F. 27
Rosier, R. N. 208
Rossman, P. J. 107

Sahi, T. (Suppl 1) S3
Sallis, J. D. 134
Sappington, L. J. 313
Sartoris, D. 305
Sauk, J. J. 58
Sawyer, J. R. 208
Schilte, J. P. 35
Schink-Ascani, M. 216
Schiraldi, G. 71
Schoutens, A. 95
Schulz, E. E. (Suppl 1) S64
Schwamm, W. 27

Schwartz, Z. 359
Scott, C. K. 349
Sebeny, E. A. 292
Sela, J. 359
Sernbo, I. 17
Sfikakis, P. P. 288
Shen, V. 321
Shen, V. 275
Shimakoshi, Y. 403
Shimizu, M. 383
Shimizu, M. 259
Simonen, O. (Suppl 1) S8
Singer, F. R. (Suppl 2) S7
Smith, E. L. (Suppl 1) S50
Somerman, M. J. 58
Somers, N. M. 164
Stevenson (Suppl 1) S55
Stribrska, L. 183
Stribrska, L. 183
Swain, L. D. 359

Tardif, C. 328
Tarján, G. 226
Tatakis, D. N. 333
Termine, J. D. 421
Termine, J. D. 248
Tilvis, R. (Suppl 1) S3
Torres, R. 436
Torres, R. 14
Tosi, G. 71
Trevisan, C. 1
Tsakalakos, N. 369
Tsekoura, M. 369
Turner, C. H. 116

Ulivieri, F. M. 1

Väänänen, H. K. (Suppl 1) S11
Välimäki, M. (Suppl 1) S70
van Leeuwen, J. P. T. M. 35
Vanderschueren, D. 84
Vanderschueren, D. 168
Verstraeten, A. 168
Vetter, U. 248
Vignoles, M. 269
Villareal, D. T. 141
Visser, T. J. 35

Wakamatsu, N. 128
Wartofsky, L. 308
Weaver, D. S. 438
Weaver, C. M. 244
Weinstein, R. S. 313
Wientroub, S. 202
Wikenheiser, M. A. 427
Wikstrom, B. 389
Williamson, M. K. 355
Wisse, E. 355
Wray, H. L. 308

Yague, M. 436
Yamaguchi, A. 221
Yamazaki, K. 101
Yiatzides, A. 369
Young, M. F. 58
Young, M. F. 421

Zagzebski, J. A. 107
Zimnoch, L. 27
Zipori, D. 202

Subject Index

$1,25(OH)_2D_3$, 168
Absorptiometry, 1, 235
Acidic phospholipids, 193
Adipocytes, 221
Adsorption, 134, 193
Aging, 1, 235, 251, 259
Alcohol, Suppl 1: S70
Alkaline phosphatase, 14, 120, 124
Alzheimer's disease, 144
Amorphous tricalcium phosphate, 378
AMP, 284
Analgesia, 17; Suppl 2: S9
Androgen, 183
Apatite, 128, 269
Apatitic tricalcium phosphate, 378

Biochemical markers, 17, Suppl 1: S26
Bisphosphonate, 280, 403, 407
Bone, 20, 107, 235, 284
Bone allograft, 349
Bone cells, 138
Bone density, 77, 84, 101, 116, 161, 251, 292, 305, 313, Suppl 1: S33, S50, S60, S81, S83
Bone disease, 155
Bone Gla protein, 355
Bone healing, 427
Bone histology, Suppl 1: S50
Bone implants, 43
Bone induction, 349
Bone loss, 90
Bone mass, 1, 226
Bone metabolism, 95
Bone mineral metabolism, Suppl 1: S70
Bone remodeling, 398
Bone resorption, 43, 51, 275, 394, 407
Bone sialoprotein, 421
Bone strength, 116
Bone turnover, Suppl 2: S16
Breast cancer, 433

Calcification, 359, 389
Calcitonin, 17, 27, 71, 164, 179, 226, 284, Suppl 1: S60, Suppl 2: S2, S9
Calcitonin propeptide, 138
Calcitriol, 240, Suppl 1: S88
Calcium, 164, 308, 333, Suppl 1: S33, S42, S88
Calcium absorption, 240, 244
Calcium carbonate, 308
Calcium oxalate, 244
cAMP, 138, 221
Carbonate, 6, 383
Carbonate ion, 251, 259, 269
Carbonic anhydrase II, 328
Cartilage cells, 340
Cell proliferation, 138
Cholecalciferols, Suppl 1: S85
Chondrocytes, 340
Chondroprotection, 27
Circadian rhythm, 373
Collagen, 188, Suppl 1: S24
Colle's fracture, 292
Computed tomography, 71, 427
Cortical bone, 313
Corticosteroids, 27, 120
Crystallization, 134
Cyclooxygenase inhibitor, 84
Cyclosporin A, 232, 275
Cytokines, 321

Densitometry, 313, Suppl 1: S21
Dentin, 6
Dentin Gla protein, 355
Diabetes, 155
Diabetes mellitus, 179, 288
DNA synthesis, 394
Dual photon absorptiometer, 298
Dual-energy x-ray absorptiometry, 101, 174, 305, 313, 438
Dwarfism, 389

EDTA, 280
EGF-$1,25(OH)_2D_3$ binding, 35
Elcatonin, 436
Enamel, 6, 383
Estrogen, 77, 124, 183, Suppl 1: S42, S55, S80, S83
Exercise, Suppl 1: S50, S80, S81, S83

Femoral neck fractures, Suppl 1: S8, S78
Fluoride, Suppl 1: S64, S68

Glass ceramic, 359
Glucocorticoids, 367

Heat shock, 58
Heterotopic ossification, 208
Hip fractures, Suppl 1: S5
Histomorphometry, 20
Hydrochlorothiazide, 51
Hydroxyapatite, 6, 134, 193, 248, 389
Hydroxyproline, 14
Hypomagnesemia, 288
Hypothyroidism, 226

Immobilization, 27
Implants, 359
Indomethacin, 197
Infrared spectroscopy, 259
Inositol triphosphate, 333
Interleukin 1, 403
Intestinal absorption, 280

Kinetics, 134

Leukemia inhibitory factor, 394
Leukotriene B_4, 197
Ligament, 58
Lingula shell, 128
Lumbar spine, 1, 101

Macrophages, peritoneal, 403
Marrow stromal cells, 202
Medullary bone, 124
Meniscectomy, 27
Menopause, 1, 95, 101
Metabolic bone disease, Suppl 1: S31
Miacalcin, Suppl 2: S2
Mineralization, 20, 193, 355
Mitotubes, 221
Monoclonal antibodies, 317

Ossification, 349
Osteoarthritis, 20, 168
Osteoblast, 35, 120, 183, 197, 202, 221, 333, 407, 421, Suppl 1: S26
Osteocalcin, 14, 43, 84, 355, 373, Suppl 1: S85
Osteoclasts, 153, 275, 317, 328, 407, 421, Suppl 1: S11

Osteogenesis imperfecta, 248
Osteogenic cells, 124
Osteolytic lesions, Suppl 2: S7
Osteomalacia, Suppl 1: S70
Osteonectin/SPARC, 58
Osteoporosis, 1, 17, 71, 107, 141, 161, 169, 235, 240, Suppl 1: S5, S8, S11, S15, S21, S24, S26, S31, S33, S42; Suppl 2: S2, S9, S14, S16, S46, S50, S55, S60, S64, S68, S70, S74, S76, S78, S80, S83, S87, S90
Osteosarcoma, Suppl 1: S26, S85
Ovariectomy, 403, Suppl 1: S80
Oxytetracycline, 43

Paget's disease, 14, 164, 436, Suppl 2: S2, S7
Pamidronate, 416, 433
Parathormone, 51
Parathyroid hormone, 35, 120, 138, 221, 275, 398
Periarthritis, 288
Pertussis toxin, 284
PGE_2, 221
Pharmacokinetics, 416, 433
Phosphate, 383
Phosphatidylserine, 193
Phosphocitrate, 134
Physical fitness, 77
Pit measurement, 65
Plasminogen inhibitor, 321
Plasminogen activator, 321
Prednisone, 71
Proteoglycan, 389
Pseudoarthrosis, 216
Pulsed electromagnetic fields, 216

Quail, 124

Rheumatic disease, Suppl 1: S90
Rickets, 188, 340

Salmon calcitonin, 369, Suppl 2: S2, S7, S14, S16
Sarcoidosis, 71
Serum markers, 143
Single photon absorptiometry, 292
Skeletal pathophysiology, 229, 301, 303
Sleep deprivation, 373
Solubility, 6
Spectroscopy, infrared, 383
Spine, Suppl 1: S81
Stress, 58
Structural water, 128
Sulfonamides, 328

Tartrate resistant acid phosphatase, 14, 51
Thermal decomposition, 128
Thiazide, 164
Tracer exchange, 244
Triiodothyronine, 95
Turner's syndrome, 77

Ultrasound, 107, 112, 116
Urinary hydroxyproline, 369
Urinary calcium, 369

Vertebral fractures, 369
Vitamin D, 84, 340, Suppl 1: S46, S85, S87, S88

Walking, 112
Warfarin, 43, 355

Zinc, 179